

B<sup>2</sup>

5 wherein said quantity, said amount, and said association provide said water- based  
6 drilling fluid effective rheology and fluid loss control properties  
7 comprising low shear rate viscosity; and  
8 a concentration of non-toxic water emulsifiable material as an internal phase, said  
9 surfactant being effective to emulsify said water emulsifiable material and  
10 to produce emulsion droplets having an average diameter of about 30  
11 microns or less.

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B<sup>3</sup>

1 272. (Amended) A water-based drilling fluid comprising:  
2 an aqueous base fluid;  
3 at least about 2 lb./bbl. water soluble polymer; and,  
4 at least about 0.2 lb./bbl. of a surfactant in association with said water soluble  
5 polymer;  
6 wherein said water soluble polymer, said surfactant, and said association provide  
7 said water- based drilling fluid with effective rheology and fluid loss  
8 control properties comprising low shear rate viscosity.

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B<sup>4</sup>

1 329. (Amended) A water-based drilling fluid comprising:  
2 an aqueous base fluid;  
3 about 7.5 lb./bbl. water soluble polymer; and,  
4 about 2 lb./bbl. of a surfactant in association with said water soluble polymer;  
5 wherein said water soluble polymer, said surfactant, and said association provide  
6 said water- based drilling fluid with effective rheology and fluid loss  
7 control properties comprising low shear viscosity.

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1           392. (New) A water-based drilling fluid comprising:  
2           an aqueous base fluid;  
3           a quantity of about 2 lb/bbl. or more of water soluble polymer; and,  
4           an amount of surfactant in association with said water soluble polymer;  
5           wherein said quantity, said amount, and said association provide said water  
6                 soluble polymer with effective rheology and fluid loss control properties  
7                 comprising low shear rate viscosity.

1           393. (New) The water-based drilling fluid of claim 392 wherein said low shear  
2           rate viscosity comprises about 70,000 cP or more upon exposure to 0.3 rpm.

B5  
1           394. (New) The water-based drilling fluid of claim 392 wherein said low shear  
2           rate viscosity comprises about 100,000 cP or more upon exposure to 0.3 rpm.

1           395. (New) The water-based drilling fluid of claim 392 further comprising a  
2           concentration of non-toxic water emulsifiable material as an internal phase, said quantity  
3           being sufficient to provide effective lubrication properties to said drilling fluid.

1           396. (New) The water-based drilling fluid of claim 393 further comprising a  
2           concentration of non-toxic water emulsifiable material as an internal phase, said quantity  
3           being sufficient to provide effective lubrication properties to said drilling fluid.

1           397. (New) The water-based drilling fluid of claim 392 wherein said fluid  
2           consists essentially of additives other than a solid bridging agent.

1           398. (New) The water-based drilling fluid of claim 396 wherein said fluid  
2           consists essentially of additives other than a solid bridging agent.

1           399.   (New) The water-based drilling fluid of claim 392 wherein said water-  
2 soluble polymer comprises xanthan polysaccharides.

1           400.   (New) The water-based drilling fluid of claim 396 wherein said water-  
2 soluble polymer comprises xanthan polysaccharides.

1           401.   (New) The water-based drilling fluid of claim 398 wherein said water-  
2 soluble polymer comprises xanthan polysaccharides.

1           402.   (New) A water-based drilling fluid comprising:

2           an-aqueous-base fluid;

3           a quantity of about 2 lb/bbl. or more of water soluble polymer;

4           an amount of surfactant in association with said water soluble polymer;

5           wherein said quantity, said amount, and said association provide said water- based

6                   drilling fluid effective rheology and fluid loss control properties

7                   comprising low shear rate viscosity; and

8           a concentration of non-toxic water emulsifiable material as an internal phase, said

9                   surfactant being effective to emulsify said water emulsifiable material and

10                   to produce emulsion droplets having an average diameter of about 30

11                   microns or less.

1           403.   (New) The water-based drilling fluid of claim 402 wherein said low shear  
2 rate viscosity comprises about 70,000 cP or more upon exposure to 0.3 rpm.

1           404.   (New) The water-based drilling fluid of claim 402 wherein said low shear  
2 rate viscosity comprises about 100,000 cP or more upon exposure to 0.3 rpm.

1           405.   (New) The water-based drilling fluid of claim 402 further comprising a  
2   concentration of non-toxic water emulsifiable material as an internal phase, said quantity  
3   being sufficient to provide effective lubrication properties to said drilling fluid.

1           406.   (New) The water-based drilling fluid of claim 403 further comprising a  
2   concentration of non-toxic water emulsifiable material as an internal phase, said quantity  
3   being sufficient to provide effective lubrication properties to said drilling fluid.

1           407.   (New) The water-based drilling fluid of claim 404 further comprising a  
2   concentration of non-toxic water emulsifiable material as an internal phase, said quantity  
3   being sufficient to provide effective lubrication properties to said drilling fluid.

1           408.   (New) The water-based drilling fluid of claim 402 wherein said fluid  
2   consists essentially of additives other than a solid bridging agent.

1           409.   (New) The water-based drilling fluid of claim 407 wherein said fluid  
2   consists essentially of additives other than a solid bridging agent.

1           410.   (New) The water-based drilling fluid of claim 401 wherein said water-  
2   soluble polymer comprises xanthan polysaccharides.

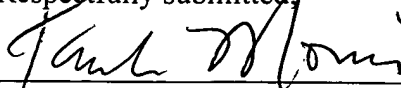
1           411.   (New) The water-based drilling fluid of claim 407 wherein said water-  
2   soluble polymer comprises xanthan polysaccharides.

1           412.   (New) The water-based drilling fluid of claim 409 wherein said water-  
2   soluble polymer comprises xanthan polysaccharides.

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The Commissioner is hereby authorized to charge any fees in connection with this  
response, or to credit any overpayment, to Deposit Account No. 02-0429 maintained by  
Baker Hughes Incorporated.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paula Morris", written over a horizontal line.

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